

Amendments to the Claims

This listing of claims will replace all prior versions, and all listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method for automatically detecting defects in an image scanning device, comprising the steps of:
performing a defect calibration scan of an image scanning area;
analyzing data produced from the defect calibration scan to detect at least one defect in at least one section of the image scanning area; and
generating a tag containing information representing the result of the defect detection for each section of the image scanning area a the detected defect.
2. (Original) The method of claim 1, wherein the defect calibration scan data is performed on the occurrence of at least one of the group of events comprising when the image scanning device is powered up, upon request by a user, and periodically.
3. (Original) The method of claim 1, further comprising storing the tag.
4. (Original) The method of claim 3, further comprising repeating the steps of performing the defect calibration scanning, analyzing defect calibration scan data to detect for a new defect and a change in any previously detected defect, generating and storing a tag for each new detected defect, and updating the stored tag for each previously detected defect that has changed.
5. (Original) The method of claim 1, further comprising automatically compensating for the defect based on information contained within the tag.
6. (Original) The method of claim 1, further comprising determining the nature of the defect by recursively dividing the section of the image scanning area tagged as having a defect into subareas and analyzing each subarea in detail.
7. (Currently amended) The method of claim 1, further comprising determining whether the section of the image scanning area tagged as having a the defect is included in a target image region.
8. (Currently amended) The method of claim 7, further comprising ignoring the section of the image scanning area tagged as having a the defect if that section is determined not to be included in the target image region.
9. (Original) The method of claim 8, wherein the section of the image scanning area tagged as having a defect is ignored in autofitting the target image to the image scanning area.

10. (Currently amended) The method of claim 8, wherein the section of the image scanning area tagged as having a the defect is ignored in cloning the target image to produce multiple target images over the image scanning area.

11. (Currently amended) The method of claim 8, wherein the section of the image scanning area tagged as having a the defect is ignored in enlarging the target image to fit across multiple image scanning areas.

12. (Currently amended) The method of claim 7, further comprising smoothing over the section of the image scanning area tagged as having a the defect if that section is determined to be included in the target image region.

13. (Original) The method of claim 1, wherein the defect calibration scan is a low resolution scan.

14. (Currently amended) An apparatus for automatically detecting defects in an image scanning device, comprising:
an analyzer for analyzing data produced from a defect calibration scan of an image scanning area by the image scanning device to detect at least one defect in at least one section of the image scanning area; and
a tag generator for generating a tag containing information representing the result of the defect detection for each section of the image scanning area in which the defect is detected.

15. (Original) The apparatus of claim 14, wherein the defect calibration scan data is performed on the occurrence of one of the group of events comprising when the image scanning device is powered up, upon request by a user, and periodically.

16. (Original) The apparatus of claim 14, further comprising a memory for storing the tag.

17. (Original) The apparatus of claim 16, wherein the defect calibration scan is repeatedly produced, the analyzer for each repeated scan analyses the calibration scan data to detects a new defect and to detect a change in any previously detected defect, and the tag generator generates a tag for each new defect and updates the tag for each previously detected defect that has changed, and wherein the new tags and updated tags are stored in the memory.

18. (Original) The apparatus of claim 14, further comprising a compensator for compensating for the defect based on information contained within the tag.

19. (Original) The apparatus of claim 14, further comprising means for determining the nature of the defect by recursively dividing the section of the image scanning area tagged as having a defect into subareas and analyzing each subarea in detail.

20. (Original) The apparatus of claim 14, further comprising means for determining whether the section of the image scanning area tagged as having a defect is included in a target image region.

21. (Original) The apparatus of claim 20, further comprising means for ignoring the section of the image scanning area tagged as having a defect if that section is determined not to be included in the target image region.

22. (Currently amended) The apparatus of claim 21, wherein the section of the image scanning area tagged as having a the defect is ignored in autofitting the target image to the image scanning area.

23. (Currently amended) The apparatus of claim 21, wherein the section of the image scanning area tagged as having a the defect is ignored in cloning the target image to produce multiple target images over the image scanning area.

24. (Currently amended) The apparatus of claim 21, wherein the section of the image scanning area tagged as having a the defect is ignored in enlarging the target image to fit across multiple image scanning areas.

25. (Currently amended) The apparatus of claim 20, further comprising means for smoothing over the section of the image scanning area tagged as having a the defect if that section is determined to be included in the target image region.

26. (Original) The apparatus of claim 14, wherein the defect calibration scan is a low resolution scan.

27. (Original) The apparatus of claim 14, wherein the analyzer and the tag generator are included in the image scanning device.

28. (Original) The apparatus of claim 16, wherein the memory is included in the image scanning device.

29. (Original) The apparatus of claim 18, wherein the compensator is included in the image scanning device.

30. (Original) The apparatus of claim 14, wherein at least one of the analyzer and the tag generator are included in a host computer connected to the image scanning device.

31. (Original) The apparatus of claim 16, wherein the memory is included in a host computer connected to the image scanning device.

32. (Original) The apparatus of claim 18, wherein the compensator is included in a host computer connected to the image scanning device.